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EXAMINER

LAM, VINH TANG

ART UNIT	PAPER NUMBER
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2629

NOTIFICATION DATE	DELIVERY MODE
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11/12/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/579,048	Applicant(s) YEUNG ET AL.	
	Examiner VINH LAM	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims **1-3** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding Claims **1-3**, the specification as originally filed has failed to provide support for the recitation of "...defining, using a **first computer system**, an object on a digital page image ... related response to be performed by a **second computer system**...". The specification does not reasonably convey one skill in the art how to make or use applicant claimed invention for "...defining, using a **first computer system**, an object on a digital page image ... related response to be performed by a **second computer system**...".

The following is a quotation of the **second paragraph** of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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2. Claims **1-3** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation of Claims **1-3** "...defining, using a **first computer system**, an object on a digital page image ... related response to be performed by a **second computer system**..." is not clear.

What are "a **first computer system**" and "a **second computer system**"?

Which is "...a **first computer system** ..." or "...a **second computer system** ..." disclosed as 102, 106, 108, and 110 in the Specification and Drawings?

There *is only one computer system* disclosed in the Specification and Drawings namely, **computer system 102**.

The above limitation is not only rejected under 35 U.S.C. 112 2nd ¶ but also invoked 35 U.S.C. 112 1st ¶ since there is no disclosure of "...defining, using a **first computer system**, an object on a digital page image ... related response to be performed by a **second computer system**..." in the originally filed specification.

To further advance prosecution, the Examiner interprets "...defining, using a **first computer system**, an object on a digital page image ... related response to be performed by a **second computer system**..." in agreement with the Specification and Drawings.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims **1-5, 9-14, 18-19, and 21-22** are rejected under 35 U.S.C. 102(b) as being anticipated by **LeKuch et al. (US PGPub. No. 2002/0041271)**.

Regarding Claim **1**, (Currently Amended) **LeKuch et al.** teach a method comprising:

providing a book ([0024], FIG. 2, *i.e. paper having multiple pages*) consisting of one or more pages ([0024], FIG. 2) of printed material ([0031], FIG. 2, *i.e. unique identifier can be any type of a graphic or alphanumeric printed on the individual pages*);

defining, using a first computer system ([0019], FIG. 1, *i.e. digitizer grid 30*), an object on a digital page image ([0031], FIG. 2, *i.e. unique identifier printed on the individual pages*), wherein the digital page image represents at least one page of the one or more pages of printed material ([0031], FIG. 2); and

linking, using the first computer system ([0019], FIG. 1, *i.e. digitizer grid 30*), a position of the object on the digital page image ([0032], FIG. 2, *i.e. unique identifier can be a predetermined location*) to a related response to be performed ([0032], FIG. 2, *i.e. particular sequence of operation*) by a second computer system ([0022], ([0023], FIG. 2, *i.e. PC 200*), wherein the position of the object on the digital page image corresponds to

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a physical position ([0032], FIG. 2, i.e. *particular region of 80 having unique identifier*) in the one or more pages of printed material which is identified by the second computer system ([0022], ([0023], FIG. 2, i.e. *PC 200*) when the book has been placed in a printed material holder ([0024], FIG. 1, i.e. *paper pad 80*) by a user, the printed material holder being coupled to the second computer system ([0023], FIG. 2, i.e. *PC 200*), wherein the position on the digital page image is defined by a relative position of the book to a known physical location of the printed material holder ([0024], [0030], FIG. 1), and

wherein the related response to be performed by the second computer system ([0023], FIG. 2, i.e. *PC 200*) is configured to provide multimedia content to the user while reading the book ([0018], FIG. 2, i.e. *inherently well-known as multi-tasking, e.g. playing music (CD-ROM players) while reading other applications on screen*).

Regarding Claim 10, (Currently Amended) **LeKuch et al.** teach a non-transitory computer readable storage medium having a plurality of machine accessible instructions stored thereon, wherein when the instructions are executed by a processor ([0017], FIG. 1, i.e. *PC 200*), the instructions cause the processor to:

define an object on a digital page image ([0031], FIG. 2, i.e. *unique identifier printed on the individual pages*) representing a page of printed material wherein the page of printed material ([0031], FIG. 2) is included in a book ([0024], FIG. 2, i.e. *paper having multiple pages*) consisting of one or more pages of printed material ([0024], FIG. 2); and

link a position of the object on the digital page image ([0032], FIG. 2, i.e. unique identifier can be a predetermined location) to a related response to be performed by the computer system ([0032], FIG. 2, i.e. particular sequence of operations), wherein the position of the object on the digital page image corresponds to a physical position ([0032], FIG. 2, i.e. particular region of 80 having unique identifier) in the one or more pages of printed material which is identified by a computer system when the book has been placed in a printed material holder ([0024], FIG. 1, i.e. paper pad 80) by a user, the printed material holder being coupled to the computer system, wherein the position on the digital page image is defined by a relative position of the book to a known physical location of the printed material holder ([0024], [0030], FIG. 1), and

wherein the related response to be performed by the computer system ([0023], FIG. 2, i.e. PC 200) is configured to provide multimedia content to the user while reading the book ([0018], FIG. 2, i.e. inherently well-known as multi-tasking, e.g. playing music (CD-ROM players) while reading other applications on screen).

Regarding Claim 19, (Currently Amended) **LeKuch et al.** teach an apparatus comprising:

a pointing device ([0019], FIG. 1, i.e. input pen 40) to determine a position on a page ([0032], FIG. 2, i.e. unique identifier can be a predetermined location) of printed material ([0031], FIG. 2, i.e. unique identifier can be any type of a graphic or alphanumeric printed on the individual pages) wherein the page of printed material is included in a book ([0024], FIG. 2, i.e. paper having multiple pages) consisting of one or more pages ([0024], FIG. 2) of printed material ([0031], FIG. 2, i.e. unique identifier can

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be any type of a graphic or alphanumeric printed on the individual pages), wherein the book is to be placed on a printed material holder ([0024], FIG. 1, i.e. paper pad 80) by a user, and wherein the position on the one or more pages of printed material is defined by a relative position ([0032], FIG. 2, i.e. particular region of 80 having unique identifier) of the book to a known physical location of the printed material holder ([0024], [0030], FIG. 1);

a communicating device ([0023], FIG. 1, i.e. link 210) coupled to the printed material holder to transmit the position to a computer system ([0017], FIG. 1, i.e. PC 200);

a maker component to define an object on a digital page image ([0031], FIG. 2, i.e. unique identifier can be any type of a graphic or alphanumeric printed on the individual pages) representing a page of the printed material ([0031], FIG. 2, i.e. unique identifier printed on the individual pages); and to link a position of the object on the digital page image ([0032], FIG. 2, i.e. unique identifier can be a predetermined location) to a related response to be performed by the computer system ([0032], FIG. 2, i.e. particular sequence of operations), wherein the related response to be performed by the computer system ([0023], FIG. 2, i.e. PC 200) is configured to provide multimedia content to the user while reading the book ([0018], FIG. 2, i.e. inherently well-known as multi-tasking, e.g. playing music (CD-ROM players) while reading other applications on screen); and

a player ([0024], FIG. 1, i.e. digitizer grid 30) component to correlate the pointed position to selected content associated with the printed material ([0024], FIG. 1), the

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selected content being accessible by the computer system ([0024], FIG. 1); and to provide a valid response ([0026], FIG. 2, *i.e.* 40 communicates to a data control device which performs different functions) to the user based at least in part on the pointed position and the correlated content, wherein the valid response includes at least one of rendering audio content, rendering video content, rendering image content, rendering text content ([0024], FIG. 1), and performing an action by the computer system ([0032], FIG. 2, *i.e.* particular sequence of operations).

Regarding Claims 2 and 11, (Currently Amended/ Previously Presented)

LeKuch et al. teach the method of claim 1 and the non-transitory medium of claim 10 respectively, wherein the response comprises at least one of rendering audio content, rendering video content, rendering image content, rendering text content ([0030], FIG. 1), and performing an action by the (second (Claim 2 only)) computer system ([0033], FIG. 1).

Regarding Claims 3 and 12, (Currently Amended/ Previously Presented)

LeKuch et al. teach the method of claim 2 and the non-transitory medium of claim 11 respectively, further comprising (instructions for (claim 12)) generating a multimedia database to store digital multimedia content including at least one of audio content, video content, image content, and text content ([0024], FIG. 1); a printed material content database to store positional information about objects on the digital page images and linkage information between the objects on the digital page images ([0021], [0030], FIG. 1) and at least one of the multimedia contents and actions ([0021], [0024],

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FIG. 1); and an action library to store directives for actions to be performed on the computer (second (Claim 3 only)) system ([0035], *FIG. 1*).

Regarding Claims 4 and 13, (Previously Presented) **LeKuch et al.** teach the method of claim 2 and the non-transitory medium of claim 11 respectively, wherein (instructions for (claim 13)) defining the object on the digital page image comprises using an electronic pen to outline boundaries of the object on the digital page image ([0033], *FIG. 1*).

Regarding Claims 5 and 14, (Previously Presented) **LeKuch et al.** teach the method of claim 2 and the non-transitory medium of claim 11 respectively, wherein (instructions for (claim 14)) defining the object on the digital page image comprises using an electronic pen to select key points on the boundary of the object on the digital page image ([0033], *FIG. 1*).

Regarding Claims 9 and 18, (Previously Presented) **LeKuch et al.** teach the method of claim 2 and the non-transitory medium of claim 11 respectively, wherein the one or more pages of printed material comprises material generated by a user ([0024], *FIG. 1*).

Regarding Claim 21, (Previously Presented) **LeKuch et al.** teach the apparatus of claim 19, further comprising a multimedia database to store digital multimedia content ([0024], *FIG. 1*), a printed material content database to store positional information about objects on the digital page images ([0021], [0030], *FIG. 1*) and linkage information between the objects on the digital page images ([0032], *FIG. 2*, *i.e. unique identifier can be a predetermined location*) and at least one of the multimedia

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contents and actions, and an action library to store directives for actions to be performed on the system ([0035], FIG. 1).

Regarding Claim **22**, (Currently Amended) **LeKuch et al.** teach the apparatus of claim 19, wherein the printed material comprises material generated by a user ([0024], FIG. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **6-7**, **15-16**, and **20** is rejected under 35 U.S.C. 103(a) as being unpatentable over **LeKuch et al. (US PGPub. No. 2002/0041271)**.

Regarding Claims **6** and **15**, (Previously Presented) **LeKuch et al.** teach method of claim 2 and the non-transitory medium of claim 11 respectively, wherein (instructions for (claim 15)) defining the object on the digital page image comprises using a mouse ([0042], *i.e. obviously well-known that a mouse may replace pen 40 as an input device*) to manipulate a graphical object on a display to encapsulate the boundary of the object on the digital page image as displayed on the display ([0033], FIG. 1).

Regarding Claims **7** and **16**, (Previously Presented) **LeKuch et al.** teach the method of claim 2 and the non-transitory medium of claim 11 respectively, wherein defining the object on the page comprises using a mouse ([**0042**], *i.e. obviously well-known that a mouse may replace pen 40 as an input device*) to select key points on the boundary of the object on the page as displayed on a display ([**0033**], *FIG. 1*).

Regarding Claim **20**, (Previously Presented) **LeKuch et al.** teach the apparatus of claim 19, wherein the pointing device comprises an electronic pen ([**0033**], *FIG. 1*).

Response to Arguments/Amendments/Remarks

5. Claims **8** and **17** are canceled.
6. Applicant's arguments filed 10/14/2010 have been fully considered but they are not persuasive.

First of all, applicant argues that **LeKuch et al.'s** Paper Pad **80** is not "a book" but "*the pages of the pad of paper include a physical writing*". However, the Examiner respectfully disagrees because:

- i. Pages of the paper pad are, well-know in the academic institutions, hand-written and distributed by professors/lecturers/instructors as Text Books, Reading References, and Thesis/Proposal Materials.

- ii. Undisputedly, **LeKuch et al.'s** Paper Pad **80** is not only functions as an input device to recognize physical writing but also utilized as "*a book*" that allows users to

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read, edit, comment, and further comprises “*unique identifier can be any type of a **graphic or alphanumeric**, or a combination thereof*” [0031].

Finally, applicant argues that the newly amended limitations “*wherein the related response to be performed by the computer system is configured to provide multimedia content to the user while reading the book*”. However, the Examiner respectfully disagrees because **LeKuch et al.’s** teach

“*wherein the related response to be performed by the computer system ([0023], FIG. 2, i.e. PC 200) is configured to provide multimedia content to the user while reading the book ([0018], FIG. 2, i.e. inherently well-known as multi-tasking, e.g. playing music (CD-ROM players) while reading other applications on screen).*”

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH T. LAM whose telephone number is (571)270-3704. The examiner can normally be reached on M-F (7:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Vinh T Lam/

Examiner, Art Unit 2629

/Amare Mengistu/

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